ABSTRACT

A process for making absorbent cellulosic paper products such as sheet for towel, tissue and the like, includes compactively dewatering a nascent web followed by wet belt creping the web at an intermediate consistency of anywhere from about 30 to about 60 percent under conditions operative to redistribute the fiber on the belt, which is preferably a fabric. In preferred embodiments, the web is thereafter adhesively applied to a Yankee dryer using a creping adhesive operative to enable high speed transfer of the web of intermediate consistency such as a poly(vinyl alcohol)/polyamide adhesive. An absorbent sheet so prepared from a papermaking furnish exhibits an absorbency of at least about 5 g/g, a CD stretch of at least about 4 percent, and an MD/CD tensile ratio of less than about 1.1, and also exhibits a maximum CD modulus at a CD strain of less than 1 percent and sustains a CD modulus of at least 50 percent of its maximum CD modulus to a CD strain of at least about 4 percent. Products of the invention may also exhibit an MD modulus at break 1.5 to 2 times their initial MD modulus.